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Morrill

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(54) **HYDRODYNAMIC CAVITATION DEVICE**

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See application file for complete search history.

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(57) **ABSTRACT**

A hydrodynamic cavitation unit for a hydrodynamic cavitation device is provided. The hydrodynamic cavitation device is configured for fluid communication with an inlet conduit and an outlet conduit. The hydrodynamic cavitation unit includes a body; and a plurality of lumens through the body. Each of the lumens is configured for fluid communication from the inlet conduit, through the body, and to the outlet conduit. A ratio of a total cross-sectional area of the lumens to a cross-sectional area of the inlet conduit is about 1:1. A ratio of a cross-sectional area of the hydrodynamic cavitation unit to the cross-sectional area of the inlet conduit is about 2:1. Each of the lumens may have a frustoconical or Venturi shape. Related apparatuses, systems, techniques, and articles are also described.

14 Claims, 16 Drawing Sheets

